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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/589,620

08/01/2007

Koji Kawaguchi

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11/19/2009

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EXAMINER

JOHNSON, PHILLIP A

ART UNIT

PAPER NUMBER

3656

NOTIFICATION DATE

DELIVERY MODE

11/19/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentmail@whda.com

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/589,620 | Applicant(s) KAWAGUCHI ET AL. | |
| | Examiner PHILLIP JOHNSON | Art Unit 3656 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

The amendment filed on July 15, 2009 is acknowledged. Claims 1 and 2 are pending in this application. As amended, claim 1 overcomes the 35 U.S.C 112, second paragraph rejection cited in the previous office action.

Claim Objections

1. Claim 1 is objected to because of the following informalities: the claim language "the total crowning amount, defined as crowning amount of outer ring + crowning amount of inner ring + crowning amount of roller.times.2 is 50 μ m or more, and the crowning ratio of the outer ring, defined as crowning amount of outer ring/total crowning amount) is 40% or more, and the roller crowning ratio, defined as roller crowning amount x 2)/total crowning amount is 20% or less" should be read - - the total crowning amount, defined as the sum of the crowning amount of the outer ring, the crowning amount of the inner ring, and two times the crowning amount of the roller, is 50 μ m or more, and the crowning ratio of the outer ring, defined as crowning amount of outer ring divided by the total crowning amount, is 40% or more, and the roller crowning ratio, defined as two times the roller crowning amount divided by the total crowning amount, is 20% or less - -. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites parenthetical information (i.e. "= inner ring crowning amount/total crowning amount") that renders the claim indefinite, as it is not clear if this information is being used to defined the scope of the claimed apparatus.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 1 and 2, as best understood, are rejected under 35**

U.S.C. 102(b) as being anticipated by Nakagawa et al. (USP 6,086,261).

Re claim 1, Nakagawa (Fig. 9) discloses all of the limitations of a similar device comprising:

- An outer ring (1) having an outer ring raceway surface undergoing crowning.
- An inner ring having (2) an inner ring raceway surface undergoing crowning.

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- Plural tapered rollers (3), having a rolling surface undergoing crowning, rolling universally between said outer and inner ring raceway surfaces.
- The total crowning amount, defined as crowning amount of outer ring + crowning amount of inner ring + crowning amount of roller.times.2, is 50 μ m or more (*id.* col. 13, lines 9 – 13).
- The crowning ratio of the outer ring, defined as crowning amount of outer ring/total crowning amount, is 40% or more (*ibid.* col. 13, lines 9 – 13).
- The roller crowning ratio, defined as roller crowning amount x 2/total crowning amount, is 20% or less (*ibid.* col. 13, lines 9 –13).

Re claim 2

- The inner wheel crowning ratio (=inner ring crowning amount/total crowning amount) is 10% or more (*ibid.* col. 13, lines 9 – 13).

Response to Arguments

Applicant's arguments with respect to claims 1 and 2 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHILLIP JOHNSON whose telephone number is (571)270-5216. The examiner can normally be reached on MON - FRI, 7:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Phillip Johnson/
Examiner, Art Unit 3656

/Richard WL Ridley/
Supervisory Patent Examiner, Art Unit 3656